

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: March 15, 2001, 10:52:22 ; Search time 35.6 Seconds

(Without alignments)
14.407 Million cell updates/sec

Title: US-09-288-719-3

Perfect score: 81

Sequence: 1 GGGSGGRASGGGS 15

Scoring table: BLOSUM62

Searched: 268485 seqs, 34193795 residues

Total number of hits satisfying chosen parameters: 268485

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

1: A.Geneseq.36.*
2: /SIDSL/gcgdata/geneseq/geneseqp/AA1980.DAT.*
3: /SIDSL/gcgdata/geneseq/geneseqp/AA1981.DAT.*
4: /SIDSL/gcgdata/geneseq/geneseqp/AA1982.DAT.*
5: /SIDSL/gcgdata/geneseq/geneseqp/AA1983.DAT.*
6: /SIDSL/gcgdata/geneseq/geneseqp/AA1984.DAT.*
7: /SIDSL/gcgdata/geneseq/geneseqp/AA1985.DAT.*
8: /SIDSL/gcgdata/geneseq/geneseqp/AA1986.DAT.*
9: /SIDSL/gcgdata/geneseq/geneseqp/AA1987.DAT.*
10: /SIDSL/gcgdata/geneseq/geneseqp/AA1988.DAT.*
11: /SIDSL/gcgdata/geneseq/geneseqp/AA1989.DAT.*
12: /SIDSL/gcgdata/geneseq/geneseqp/AA1990.DAT.*
13: /SIDSL/gcgdata/geneseq/geneseqp/AA1991.DAT.*
14: /SIDSL/gcgdata/geneseq/geneseqp/AA1992.DAT.*
15: /SIDSL/gcgdata/geneseq/geneseqp/AA1993.DAT.*
16: /SIDSL/gcgdata/geneseq/geneseqp/AA1994.DAT.*
17: /SIDSL/gcgdata/geneseq/geneseqp/AA1995.DAT.*
18: /SIDSL/gcgdata/geneseq/geneseqp/AA1996.DAT.*
19: /SIDSL/gcgdata/geneseq/geneseqp/AA1997.DAT.*
20: /SIDSL/gcgdata/geneseq/geneseqp/AA1998.DAT.*
21: /SIDSL/gcgdata/geneseq/geneseqp/AA1999.DAT.*
22: /SIDSL/gcgdata/geneseq/geneseqp/AA2000.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	81	100.0	15	20	V50707
2	71	87.7	14	20	V50706
3	71	87.7	14	20	V53596
4	71	87.7	16	17	R86794
5	70	86.4	15	13	R25983
6	70	86.4	15	15	R59500
7	70	86.4	15	16	R85123
8	70	86.4	15	16	R76683
9	70	86.4	15	17	W09323
10	70	86.4	15	17	R39244
11	70	86.4	15	17	R35067
12	70	86.4	15	18	W35984

13	70	86.4	15	18	W10295	Peptide linker for
14	70	86.4	15	20	Y49219	Sequence of a link
15	70	86.4	15	20	Y43414	Peptide SEQ ID NO:
16	70	86.4	15	20	Y33328	E6-sfv peptide 11n
17	70	86.4	15	20	Y27397	Flexible linker us
18	70	86.4	15	20	Y21600	Ep-919566 peptide
19	70	86.4	15	20	Y03763	Linker peptide in
20	70	86.4	15	20	W87784	Antibody-beta-lact
21	70	86.4	15	21	Y79551	Linker peptide use
22	70	86.4	15	21	Y79552	Linker peptide use
23	70	86.4	15	21	Y70606	Protein encoded by
24	70	86.4	16	17	R99243	(Gly4Ser)3ser link
25	70	86.4	17	20	W99361	Linker peptide for
26	70	86.4	18	15	R60525	Linkage peptide us
27	70	86.4	18	20	Y43500	Linker for dual av
28	70	86.4	18	21	Y83214	Peptide linker use
29	70	86.4	19	20	Y25402	Activity modulation
30	70	86.4	20	16	R87737	Spacer #5 for a ci
31	70	86.4	20	18	W18554	Linker sequence 1
32	70	86.4	20	20	Y43415	Peptide SEQ ID NO:
33	70	86.4	22	16	R87736	Spacer #4 for a ci
34	70	86.4	23	20	Y25361	IFNAR2/IFN-beta co
35	70	86.4	24	20	Y23689	stalling peptide u
36	70	86.4	25	18	W18555	Linker sequence 2
37	70	86.4	25	18	W10303	Peptide linker for
38	70	86.4	28	18	W34415	Primary library #3
39	70	86.4	28	18	W35978	Primary library SE
40	70	86.4	28	20	Y25360	IFNAR2/IFN-beta co
41	70	86.4	29	18	W52665	Peptide library fo
42	70	86.4	29	18	W34413	Primary library #1
43	70	86.4	29	18	W34416	Primary library #4
44	70	86.4	29	18	W35976	Primary library SE
45	70	86.4	29	18	W35979	Primary library SE

ALIGNMENTS

RESULT	ID	Standard	Peptide	Length	AA
1	Y50707	standard	peptide	15	AA.
XX	AC	Y50707;			
XX	DE	08-FEB-2000 (first entry)			
XX	XX	VH-L-VL construct peptide linker 2.			
XX	KW	Immunoglobulin: light chain; VL region; heavy chain; VH region;			
XX	KW	single-chain; antigen binding; variable domain; anticancer; treatment;			
XX	KW	antiviral; antibacterial; antimetastatic; antiinflammatory; diagnosis;			
XX	KW	tumor vaccine; autoimmune disease; inflammation; blood disorder;			
XX	OS	nervous system; infection.			
XX	XX	Synthetic.			
XX	PN	DE19827239-A1.			
XX	PD	23-DEC-1999.			
XX	PF	18-JUN-1998; 98DE-1027239.			
XX	PR	18-JUN-1998; 98DE-1027239.			
XX	PA	(HMRI) HOECHST MARION ROUSSEL DEUT GMBH.			
XX	PI	Kontermann R, Sedlacek H, Mueller R;			
XX	DR	WPI; 1999-591691/51.			
XX	XX	Single chain molecule binding antigen, its preparation and medicine			
XX	PT	containing this molecule - consists of binding some antigen with			
XX	PT	different variable domain of light and heavy chain of immunoglobulin.			

XX Claim 9; Page 14; 26pp; German.
 PS
 XX
 CC This invention describes a novel single-chain molecule (I) that binds
 CC multiple antigens and comprises two variable domains of heavy
 CC immunoglobulin chains (VH) and two variable domains of light chains (VL).
 CC The domains are provided as two VH-VL constructs which are attached via
 CC a peptide (P). Any VH and VL may be replaced by their functional
 CC fragments. The products of the invention have anticancer, antiviral,
 CC antibacterial, antimalarial, and antiinflammatory activity. (I) are used
 CC to treat, prevent or diagnose tumors (e.g. as tumor vaccines), autoimmune
 CC diseases and inflammation (e.g. transplant rejection and arthritis),
 CC blood disorders (e.g. of the coagulation and/or circulatory systems, such
 CC as anemia, leucopenia, thrombocytopenia and hypertension), nervous system
 CC disorders and/or infections (by viruses or bacteria, or malaria),
 CC including, when (I) include a fusogenic peptide, use for gene transfer.
 CC This sequence represents a linker peptide used in the construction of the
 CC single chain molecule of the invention.
 CC NOTE: This specification is a treat as basic for CZ-9901215 in Derwent
 CC week 9951.
 CC
 XX Sequence 15 AA:
 SQ
 Query Match 100.0%; Score 81; DB 20; Length 15;
 Best Local Similarity 100.0%; Pred. No. 0.00034;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 GGGSGGRASGGGS 15
 |||||||||
 Db 1 gggsggrasgggs 15
 RESULT 2
 Y50706 standard; peptide; 14 AA.
 XX Y50706;
 XX 08-FEB-2000 (first entry)
 DE VH-L-VL construct peptide linker 1.
 DE
 XX Immunoglobulin; light chain; VL region; heavy chain; VH region;
 KW single-chain; antigen binding; variable domain; anticancer; treatment;
 KW antiviral; antibacterial; antimalarial; antiinflammatory; diagnosis;
 KW tumor vaccine; autoimmune disease; inflammation; blood disorder;
 KW nervous system; infection.
 XX
 OS Synthetic.
 XX
 PN DEL19827239-A1.
 PD 23-DEC-1999.
 XX
 XX 18-JUN-1998; 98DE-1027239.
 PF
 XX 18-JUN-1998; 98DE-1027239.
 PR
 XX (HMRI) HOECHST MARION ROUSSEL DEUT GMBH.
 PA
 PI Kontermann R, Sedlacek H, Mueller R;
 DR WPI; 1999-591691/51.
 DR
 XX Single chain molecule binding antigen, its preparation and medicine
 PT containing this molecule - consists of binding some antigen with
 PT different variable domain of light and heavy chain of immunoglobulin.
 XX
 PS Claim 9; Page 13; 26pp; German.
 CC This invention describes a novel single-chain molecule (I) that binds
 CC multiple antigens and comprises two variable domains of heavy

CC immunoglobulin chains (VH) and two variable domains of light chains (VL).
 CC The domains are provided as two VH-VL constructs which are attached via
 CC a peptide (P). Any VH and VL may be replaced by their functional
 CC fragments. The products of the invention have anticancer, antiviral,
 CC antibacterial, antimalarial, and antiinflammatory activity. (I) are used
 CC to treat, prevent or diagnose tumors (e.g. as tumor vaccines), autoimmune
 CC diseases and inflammation (e.g. transplant rejection and arthritis),
 CC blood disorders (e.g. of the coagulation and/or circulatory systems, such
 CC as anemia, leucopenia, thrombocytopenia and hypertension), nervous system
 CC disorders and/or infections (by viruses or bacteria, or malaria),
 CC including, when (I) include a fusogenic peptide, use for gene transfer.
 CC This sequence represents a linker peptide used in the construction of the
 CC single chain molecule of the invention.
 CC NOTE: This specification is a treat as basic for CZ-9901215 in Derwent
 CC week 9951.
 CC
 XX Sequence 14 AA:
 SQ
 Query Match 87.7%; Score 71; DB 20; Length 14;
 Best Local Similarity 100.0%; Pred. No. 0.0048;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 GGGSGGRASGGG 13
 |||||||||
 Db 1 gggsggrasggg 13
 RESULT 3
 Y33596 standard; Protein; 14 AA.
 XX Y33596;
 XX 20-DEC-1999 (first entry)
 DE VH-VL domain linker peptide #8.
 DE
 XX Antigen binding; single chain; variable domain; VH domain; light chain;
 KW heavy immunoglobulin chain; VL domain; anticancer; antiviral; tumor;
 KW antibacterial; antimalarial; antiinflammatory; treatment; prevention;
 KW diagnosis; vaccine; autoimmune disease; inflammation; blood disorder;
 KW transplant rejection; arthritis; nervous system disorder; infection.
 XX
 OS Synthetic.
 XX
 PN DEL19816141-A1.
 PD 14-OCT-1999.
 XX
 XX 09-APR-1998; 98DE-1016141.
 PF
 XX 09-APR-1998; 98DE-1016141.
 PR
 XX (HMRI) HOECHST MARION ROUSSEL DEUT GMBH.
 PA
 PI Kontermann R, Sedlacek H, Mueller R;
 DR WPI; 1999-581511/50.
 DR
 XX New polyclonal binding agents containing variable heavy and light
 PT constructs connected via peptide linker, used for treatment, prevention
 PT or diagnosis of e.g. cancer -
 XX
 PS Claim 9; Page 16; 20pp; German.
 XX
 CC This sequence represents a novel single-chain molecule (I) that binds
 CC multiple antigens and comprises two variable domains of heavy
 CC immunoglobulin chains (VH), having specificities A and B and two
 CC variable domains of light chains (VL), also with specificities A and B.
 CC The domains are provided as two VH-VL constructs which are attached via
 CC a peptide (P). Any VH and VL may be replaced by their functional
 CC fragments. The products of the invention have anticancer, antiviral,

Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GGGGSGRAGGGGS 15
||||| |||||
Db 1 99999999999999 15

RESULT 6
R59500
ID R59500 standard; peptide; 15 AA.
XX
AC R59500:
XX
DT 29-JUL-1994 (first entry)
XX
DE Hydrophilic linker #1 to make single chain antibody.
XX
KW Single chain antibody; sFv; heavy chain; light chain;
KW variable domain; hydrophilic linker; antibodies.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Region 1..5
FT /note= "first of 3 repeat units"
XX
PN W09402610-A.
XX
PD 03-FEB-1994.
XX
PE 16-JUL-1993; 93WO-US06735.
XX
PR 17-JUL-1992; 92US-0916939.
PR 17-MAR-1993; 93US-0045274.
XX
PA (DAND) DANA FARBER CANCER INST INC.
XX
PI Haseltine WA, Marasco WA;
XX
PI WPI: 1994-048868/06.
XX
DR Intracellular binding of antigens - by using antibody targetting
PT with vector system, for e.g. tumour suppression
XX
PS Claim 35; Page 25; 155pp; English.
XX
CC New vector systems comprise a sequence adapted for intracellular
CC delivery and expression contg. a promoter operably linked to an
CC antibody gene encoding an antibody which binds to a specific target
CC antigen. The antibody is esp. a single chain antibody in which the
CC heavy and light chain variable regions are joined via a hydrophilic
CC linker peptide. Examples of suitable linkers are given in R59500-
CC R59507, with R59500 being the most preferred linker.
XX
SO Sequence 15 AA;

Query Match 86.4%; Score 70; DB 15; Length 15;
Best Local Similarity 86.7%; Pred. No. 0.0067;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GGGGSGRAGGGGS 15
||||| |||||
Db 1 99999999999999 15

RESULT 7
R85123
ID R85123 standard; peptide; 15 AA.
XX
AC R85123:
XX
DT 06-JUN-1996 (first entry)

XX
DE Gene delivery fusion protein flexon peptide.
XX
KW Targeted nucleic acid; fusion protein; nucleic acid binding domain;
KW gene delivery domain; cell; GAL4; interleukin; flexon; linker; primer;
KW amplification; PCR; S.cerevisiae; gene therapy.
XX
OS Synthetic.
XX
PN W09528494-A1.
XX
PD 26-OCT-1995.
XX
PF 17-APR-1995; 95WO-US04738.
XX
PR 19-OCT-1994; 94US-0326460.
PR 15-APR-1994; 94US-0227858.
XX
PA (TARG-) TARGETED GENETICS CORP.
XX
PI Overall RW, Welser KE;
XX
DR WPI: 1995-373808/48.
DR N-PSDB; T02970.
XX
PT Fusion protein for delivering targeted nucleic acid to target cell
PT - comprises a nucleic acid binding domain and a gene delivery
PT domain, used in, e.g. gene therapy of Cystic fibrosis and in tumour
PT vaccines
XX
PS Example 3; Page 49; 80pp; English.
XX
CC A novel method of delivering a targeted nucleic acid involves a fusion
CC protein comprising nucleic acid binding domain (NBD) linked to a gene
CC delivery domain (GDD). The NBD binds the target DNA whilst the GDD
CC mediates the delivery of the target DNA into the cell. An example
CC of the fusion protein comprises the GAL4 NBD linked to the interleukin
CC (IL)-2 GDD. The NBD and GDD domain can be separated by a short flexible
CC peptide linker termed a "flexon". The oligomers T02970-1 were annealed
CC to encode such a "flexon". The annealed product was inserted between
CC the coding sequence of the yeast GAL4 NBD and the IL-2 GDD in the
CC plasmid pTSGAL4/IL-2m. This vector was transformed into E.coli DH10B
CC for production of the fusion protein. The fusion protein has applications
CC in gene therapy esp. for in vivo and in vitro gene delivery.
XX
SO Sequence 15 AA;

Query Match 86.4%; Score 70; DB 16; Length 15;
Best Local Similarity 86.7%; Pred. No. 0.0067;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GGGGSGRAGGGGS 15
||||| |||||
Db 1 99999999999999 15

RESULT 8
R76683
ID R76683 standard; Protein; 15 AA.
XX
AC R76683:
XX
DT 18-JAN-1996 (first entry)
XX
DE Human ONS-M21 antibody Fv fragment linker peptide.
XX
DE Plasmid pSCFV7-BM21; human; ONS-M21 antibody; chimeric protein;
KW medulloblastoma; brain tumour; treatment; diagnosis; Fv fragment.
XX
OS Synthetic.
XX
PN W09514041-A1.

XX 26-MAY-1995.
PD
XX
XX 19-OCT-1994; 94WO-JF01763.
PF
XX 19-NOV-1993; 93JP-0291078.
PR
XX (CHUS) CHUGAI SEIYAKU KK.
PA
XX Ohtomo T, Sato K, Tsuchiya M;
PI
XX WPI: 1995-200347/26.
DR
XX N-PSDB; Q94549.
XX
XX Reconstituted antibody against human medulloblastoma cells -
PT contains high proportion of human antibody origin and has low
PT antigenicity
XX
XX Claim 32; Page 103; 120pp; Japanese.
PS
XX
XX Q94549 encodes R76683 a peptide linker, part of the human antibody
CC ONS-M21 Fv fragment. The fragment was used in the construction of a
CC human/murine chimeric antibody, reactive with human medullo-
CC blastoma (a brain tumour) cells. The chimeric antibody can be
CC used in the diagnosis and treatment of this disease.
CC
XX
SQ Sequence 15 AA;

Query Match 86.4%; Score 70; DB 16; Length 15;
Best Local Similarity 86.7%; Pred. No. 0.0067;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GGGSGGSRASGGGGS 15
Db 1 gggsgsgsgsgsgsgs 15

RESULT 9
ID W09323 standard; peptide; 15 AA.
XX
XX W09323;
AC
XX 10-JUN-1997 (first entry)
DT
XX Peptide linker arm #1.
DE
XX Chimaeric; bispecific; DNA binding domain; trans; activator; repressor;
KW diptheria; Pseudomonas; toxin; thymidine kinase; single chain antibody;
KW pathogen; HIV Tat; papilloma virus; E6/E7; Epstein-Barr virus; EBNA;
KM hyperproliferation; p53; tumour; oligomerisation.
XX
XX Synthetic.
OS
XX W09630512-A1.
PN
XX 03-OCT-1996.
PD
XX 29-MAR-1996; 96WO-FR00477.
PF
XX 31-MAR-1995; 95FR-0003841.
PR
XX (RHON) RHONE-POULENC ROBER SA.
PA
XX Bracco L, Schweighoffer F, Tocque B;
PI
XX WPI: 1996-455359/45.
DR
XX Conditional gene expression system triggered by e.g. infection or
PT hyper-proliferation - comprises novel bi-specific proteins having
PT DNA-binding domain and second domain specific for trans-activator or
PT repressor, for gene therapy

XX Claim 23; Page 45; 81pp; French.
PS
XX
XX The invention relates to novel chimaeric, bispecific proteins which
CC comprise: (a) a DNA binding domain and (b) a domain which binds a
CC trans-activator (TA), trans-repressor (TR) or their complexes, which are
CC characteristic of a physiological or physiopathological state. The novel
CC chimaeric, bispecific proteins allow expression of a therapeutic protein
CC (e.g. diptheria or Pseudomonas toxins, thymidine kinase, single chain
CC antibodies) to be regulated in response to particular conditions.
CC Examples include making the protein responsive to the presence of
CC particular pathogenic TA moles (e.g. HIV Tat, papilloma virus E6/E7
CC proteins or Epstein-Barr virus EBNA protein), the therapeutic protein
CC will be expressed in those cells infected by that pathogen. Similarly,
CC where the chimaeric protein responds to a cellular protein typical of a
CC hyperproliferative state (esp. wild-type and mutant p53), expression can
CC be restricted to tumour cells. The sequence presented here is an example
CC of a peptide linker "arm" which connects the DNA binding domain to the TA
CC binding domain.
CC
XX
SQ Sequence 15 AA;

Query Match 86.4%; Score 70; DB 17; Length 15;
Best Local Similarity 86.7%; Pred. No. 0.0067;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GGGSGGSRASGGGGS 15
Db 1 gggsgsgsgsgsgsgs 15

RESULT 10
ID R99244 standard; peptide; 15 AA.
XX
XX R99244;
AC
XX 28-NOV-1996 (first entry)
DT
XX (Gly4Ser)3 linker.
DE
XX Bioactive fusion protein; interleukin-12; IL-12; p35 subunit;
KW p40 subunit; antitumour; cytokine; tumour; melanoma;
KW fibrosarcoma; renal cell carcinoma; immunotherapy; therapy;
KM retrovirus; vector.
XX
XX Synthetic.
OS
XX W09624676-A1.
PN
XX 15-AUG-1996.
PD
XX 07-FEB-1996; 96WO-US01787.
PF
XX 08-FEB-1995; 95US-0385335.
PR
XX (WHED) WHITEHEAD INST BIOMEDICAL RES.
PA
XX Lieschke GJ, Mulligan RC;
PI
XX WPI: 1996-384448/38.
DR
XX N-PSDB; T35195;
DR
XX N-PSDB; T35196;
DR
XX N-PSDB; T35202;
DR
XX N-PSDB; T35203.
XX
XX New DNA encoding fusion protein, esp. contg. IL-12 p35 and p40
PT subunits - for treatment of established tumours or prevention of
PT tumour establishment
XX
PS Claim 2; Page 69; 118pp; English.
XX

CC Peptide linkers (Gly4Ser)2Ser, (Gly4Ser)3Ser, (Gly4Ser)3 and
 CC (Gly6)Ser (R99242-45) are used to join the subunits of novel
 CC dimeric or multimeric fusion proteins. They have been utilised in
 CC the prodn. of bioactive interleukin-12 (IL-12) fusion proteins,
 CC linking mouse/human IL-12 p35 subunit (see also R99246) to
 CC mouse/human IL-12 p40 subunit (R99247). DNA encoding such constructs
 CC can be incorporated into a retroviral vector (see also R35198) to
 CC allow dimeric IL-12 prodn. in transfected cells. Tumour cells (esp.
 CC CEM-5, B16 or renal carcinoma cells) secreting IL-12 dimer can be
 CC used to reduce the size of established tumours and/or increase
 CC survival time, esp. in cases of melanoma, fibrosarcoma and renal
 CC cell carcinoma.
 CC
 CC Sequence 15 AA:
 SQ

Query Match 86.4%; Score 70; DB 17; Length 15;
 Best Local Similarity 86.7%; Pred. No. 0.0067;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GGGSGGSRASGGGGS 15
 |||||
 Db 1 gggsgsgsgsgsgsgs 15

RESULT 11
 R95067
 ID R95067 standard; Peptide; 15 AA.
 AC R95067;
 DT 18-AUG-1996 (first entry)
 DE scfv spacer peptide.
 XX
 KW Nucleic acid transfer system; gene transfer; gene therapy;
 KW cell targeting; multidomain protein; vector; cancer; scfv;
 KW single chain antibody.
 XX
 OS Synthetic.
 PI WO9613599-A1.
 XX
 PD 09-MAY-1996.
 XX
 PE 31-OCT-1995; 95WO-EP04270.
 XX
 PR 01-NOV-1994; 94EP-0810627.
 XX
 PA (WELLS) WELLS W.
 PI Fontana J, Wells W;
 XX
 DR WPI; 1996-239505/24.
 PT Nucleic acid transfer system for gene therapy, e.g. against cancer
 PT - includes toxin translocation domain to target nucleic acid to
 PT specific cell
 XX
 XX Example 5; Page 29; 106pp; English.
 PS A spacer peptide (R95067) is used to link the light chain
 CC variable domain to the heavy chain variable domain of a single
 CC chain recombinant antibody (scfv). It allows correct folding
 CC of an antigen binding domain present in the variable domains.
 CC The scfv is derived from hybridoma FRP5, which produces monoclonal
 CC antibody against the HER2 antigen of human tumour cells. It forms
 CC the ligand domain of a multidomain protein (see also R95053 and
 CC R95056-58) that is used with an effector nucleic acid in a novel
 CC nucleic acid transfer system suitable for gene therapy. The ligand
 CC domain has a target cell recognition function and allows cellular
 CC internalization of the multidomain protein/nucleic acid complex.
 XX

SO Sequence 15 AA:

Query Match 86.4%; Score 70; DB 17; Length 15;
 Best Local Similarity 86.7%; Pred. No. 0.0067;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GGGSGGSRASGGGGS 15
 |||||
 Db 1 gggsgsgsgsgsgsgs 15

RESULT 12

W35984
 ID W35984 standard; peptide; 15 AA.

AC W35984;

DT 11-MAR-1998 (first entry)

DE Peptide linker SEQ ID NO:18 from US5683983.

KW Interleukin 5; IL-5; receptor; inflammatory disease; eosinophil;
 KW asthma; beta-adrenergic agonist; corticosteroid; treatment; mimetic;
 KW primary library.

OS Synthetic.

PI US5683983-A.

PD 04-NOV-1997.

PE 07-JUN-1995; 95US-0484083.

PR 07-JUN-1995; 95US-0484083.

PA (GLAXO) GLAXO GROUP LTD.

PI Barrett RW, Chen M, England BP, Schatz PJ, Sloan D;

DR WPI; 1997-549007/50.

PT Treatment of disorders mediated by interleukin-5 - by administering
 PT peptide that binds to IL-5 receptor, for treatment of inflammatory
 PT diseases

PS Disclosure; Column 41-42; 38pp; English.

CC A novel method has been developed for treating a disorder mediated by
 CC IL-5 (interleukin-5). The method comprises administering a peptide that
 CC binds to the IL-5 receptor and comprises the following amino acid
 CC sequence, and dimers and oligomers of this:
 CC Cys X1 X2 Trp X3 Arg Cys X4 X5 Cys; where X1 = Gly, Ile, Val or Tyr;
 CC X2 = Asp or Glu; X3 = Ala or Val; X4 = Gln or Pro; and X5 = Ala, Glu,
 CC Lys, Met, Asn, Ser or Thr, where one or more of the CONH linkages may be
 CC replaced by a CH2OC(O)NR, phosphate, CH2SO2NR, CH2NR, C(O)NR6 or
 CC NHCONH linkage, R = H or lower alkyl and R6 = lower alkyl; the
 CC N-terminal group = NR1, NRCOR, NRCOR, NRSO2R, NHCONHR, succinimido or
 CC NHCOCH2AR; R1 = H or lower alkyl and Ar = phenyl optionally mono-, di-
 CC or tri-substituted by lower alkyl, lower alkoxy or NR3R4, R3 and R4 = H
 CC or lower alkyl, or the N atoms of the NR3R4 group can optionally be part
 CC of the amine group of the N-terminus of the peptide so as to form a
 CC cyclic peptide. The present sequence represents a peptide linker. The
 CC peptide causes the production and accumulation of eosinophils in
 CC tissues. It may be used for treating IL-5-mediated inflammatory
 CC disorders, preferably of the respiratory tract, especially asthma,
 CC optionally together with a beta-adrenergic agonist, an anti-inflammatory
 CC corticosteroid or ipratropium bromide.

XX Sequence 15 AA;

SQ

Query Match 86.4%; Score 70; DB 18; Length 15;
 Best Local Similarity 86.7%; Pred. No. 0.0067;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 OY 1 GGGGSGGRASGGGS 15
 Db 1 9999999999999999 15

RESULT 13
 ID W10295
 AC W10295; standard; peptide: 15 AA.
 AC W10295;
 DT 11-SEP-1997 (first entry)
 DE Peptide linker for soluble fused MHC heterodimer:peptide complex.
 XX Soluble; fusion; major histocompatibility complex; MHC;
 XX heterodimer; linker; antigen; binding groove; tolerance;
 KW autoantigen; disease; insulin dependent; diabetes mellitus; IDDM;
 KW antagonist; T cell; anergy; presenting cell.
 OS Synthetic.
 PN WO9640944-A2.
 XX 19-DEC-1996.
 PD 07-JUN-1996; 96WO-US10102.
 PE 27-OCT-1995; 95US-0005964.
 PR 07-JUN-1995; 95US-0480002.
 PR 07-JUN-1995; 95US-0482133.
 PR 07-JUN-1995; 95US-0483241.
 XX (ANER-) ANERGEN INC.
 PA (ZYMO) ZYMOGENETICS INC.
 PI Deshpande S, Gross JA, Kindsvogel W, Reich EP, Shepard PO;
 XX WPI; 1997-052337/05.
 DR Novel fused major histocompatibility complex:antigenic peptide
 PT complex - useful to induce tolerance to an autoantigen-related
 PT disease e.g. insulin-dependent diabetes mellitus
 XX
 PS Claim 7; Page 137; 142pp; English.
 CC A novel soluble fused major histocompatibility complex (MHC)
 CC heterodimer:peptide complex, comprises DNA encoding 1st and 2nd
 CC MHC domains, linked by DNA encoding a 5-25 residue linker, e.g. the
 CC present peptide, and a DNA encoding an antigenic peptide able to
 CC associate with a peptide binding groove of the MHC molecule, linked
 CC in frame to the DNA encoding the 2nd domain by a DNA encoding a
 CC 5-25 residue linker. The complex can be used to induce
 CC immunological tolerance in adults susceptible to, or suffering from
 CC an autoantigen related disease, e.g. insulin dependent diabetes
 CC mellitus (IDDM), by antagonising the binding of particular T cells
 CC and antigen presenting cells, to induce anergy (immunological
 CC non-responsiveness) in the targeted T cell. As the heterodimers and
 CC corresponding antigen are permanently linked into a single chain,
 CC obviating the requirement for complex heterodimer truncation or
 CC formation, the complex eliminates inefficient and non-specific
 CC peptide loading.
 XX
 SQ Sequence 15 AA;

Query Match 86.4%; Score 70; DB 18; Length 15;
 Best Local Similarity 86.7%; Pred. No. 0.0067;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GGGGSGGRASGGGS 15
 Db 1 9999999999999999 15

RESULT 14
 ID Y49219
 AC Y49219; standard; peptide: 15 AA.
 AC Y49219;
 DT 07-FEB-2000 (first entry)
 DE Sequence of a linking peptide.
 XX Monoclonal antibody; MAb; 1A7; GD2; immune response; melanoma;
 KW neuroblastoma; glioma; soft tissue carcinoma; small cell carcinoma;
 KW tumor-associated antigen.
 OS Synthetic.
 PN US5977316-A.
 PD 02-NOV-1999.
 PE 16-JAN-1996; 96US-0591196.
 PR 17-JAN-1995; 95US-0372676.
 PR (KENT) UNIV KENTUCKY.
 XX Foon KA, Chatterjee SK, Chatterjee M;
 PI WPI; 1999-619711/53.
 DR Monoclonal antibody 1A7 which elicits an anti-GD2 immunological
 PT response, useful for the development of products for the detection and
 PT treatment of cancers -
 XX
 PS Disclosure; Column 24; 74pp; English.
 CC The invention provides a monoclonal antibody (MAb) designated 1A7, which
 CC elicits an anti-GD2 (tumor-associated antigen) immunological response in
 CC humans. MAb 1A7 has defined light and heavy chain variable region
 CC sequences. The MAb 1A7 and polypeptides can be used for eliciting an
 CC anti-GD2 immune response. The polypeptides can also be used for detecting
 CC or purifying anti-GD2 antibody. The products can be used for treating GD2
 CC -associated diseases, e.g. melanoma, neuroblastoma, glioma, soft tissue
 CC carcinoma, and small cell carcinoma. They can be used for palliating the
 CC disease or for reducing the risk of recurrence.
 XX
 SQ Sequence 15 AA;

Query Match 86.4%; Score 70; DB 20; Length 15;
 Best Local Similarity 86.7%; Pred. No. 0.0067;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 OY 1 GGGGSGGRASGGGS 15
 Db 1 9999999999999999 15

RESULT 15
 ID Y43414
 AC Y43414; standard; peptide: 15 AA.
 AC Y43414;
 DT 20-DEC-1999 (first entry)
 DE Peptide SEQ ID NO:13.

XX Angiogenic homology region; AHR; thrombospondin 1; TSP-1; angiotatin;
 KW endostatin; anticancer; antiangiogenic; cancer; cardiovascular disease;
 KW obesity; osteoarthritis; duodenal ulcer; abnormal neovascularisation;
 KW wound healing; arteriosclerosis; ischaemic limb; ischaemic myocardium;
 KW diabetes mellitus; blood vessel occlusion.
 XX
 OS Synthetic.
 XX
 PN WO948924-A1.
 XX
 PD 30-SEP-1999.
 XX
 PF 23-MAR-1999; 99WO-US06334.
 XX
 PR 24-MAR-1998; 98US-0046737.
 XX
 PA (CHIL-) CHILDRENS MEDICAL CENT.
 PA (YISS) YISSUM RES & DEV CO.
 XX
 PI Ben-Sasson SA;
 XX
 DR WPI; 1999-591075/50.
 XX
 PT New angiogenic peptide derivatives, used for treating e.g. cancer,
 PT cardiovascular diseases, obesity, osteoarthritis, duodenal ulcers,
 PT abnormal neovascularisation and for wound healing
 PS
 PS Disclosure; Page 59; 62pp; English.
 XX
 CC The present invention specifically describes peptide derivatives
 CC comprising an angiogenic homology region (AHR) of endostatin. The peptide
 CC derivatives can be used for modulating angiogenesis in humans and
 CC animals. The peptides can be used to treat a wide variety of disease
 CC conditions, including cancer, cardiovascular diseases (e.g.
 CC arteriosclerosis, ischaemic limbs and ischaemic myocardium), obesity,
 CC osteoarthritis, duodenal ulcers, abnormal ocular neovascularisation
 CC associated e.g. with diabetes mellitus, and to promote wound healing or
 CC to stimulate the growth of new blood vessels to bypass, e.g. blood vessel
 CC occlusions. The peptide derivatives can also be used for the production
 CC of antibodies. The multivalent ligands may enable the administration of
 CC lower doses in order to achieve therapeutic efficacy, as compared with
 CC a univalent peptide chain. In addition, they can have long in vivo
 CC lifetimes and good biodistribution when administered orally or
 CC parenterally. The present sequence represents a peptide used in the
 CC exemplification of the present invention.
 CC
 XX
 SQ Sequence 15 AA;

Query Match 86.4%; Score 70; DB 20; Length 15;
 Best Local Similarity 86.7%; Pred. NO. 0.0067;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 OY 1 GGGGSGRAGGGS 15
 ||||| |||||
 Db 1 gggsgsgggsggggs 15

Search completed: March 15, 2001, 10:52:22
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